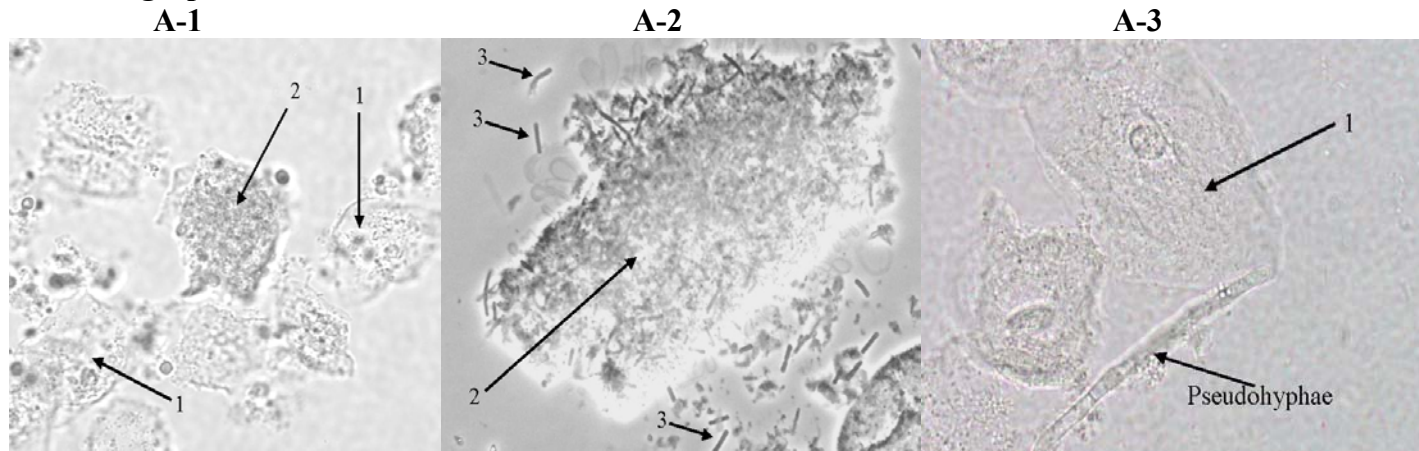


Critique: Wet Mount Proficiency Test 2005 B

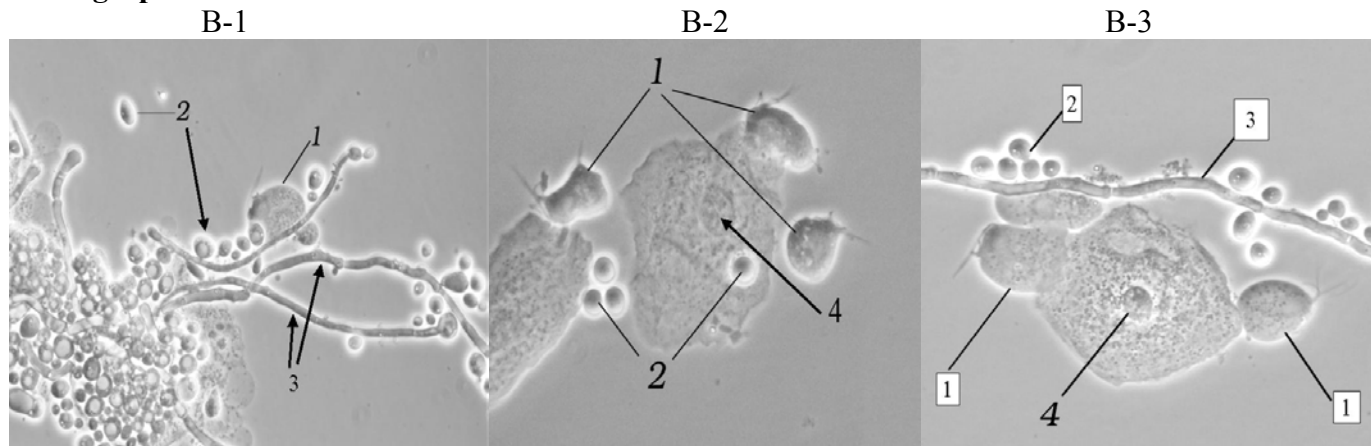
Micrograph A



Micrograph A: Intended Response

1. **Epithelial Cell, not a clue cell:** The cellular detail of these cells are easily observed. The nucleus and edges of the cells are very clear and un-obscured.
2. **Clue Cell:** A clue cell is a squamous epithelial cell that is mostly or totally covered with bacteria. The edge of the cell is hard to distinguish. The nucleus is often totally obscured by bacteria. It may be possible to observe the nucleus when focusing up and down through the cell.
3. **Bacteria:** The bacteria observed in slide A-2 appear as long, thin rods, although they can form short chains. This is not to be confused with pseudohyphae (described in detail in Micrograph B). Pseudohyphae are variable in length and width but tend to be longer and thicker than bacterial cells. Before a squamous epithelial cell is considered a clue cell, it must be covered with sufficient numbers of bacterial cells to obscure most or all of the intracellular detail. A pseudohyphae is present in micrograph A-3, but was not indicated as a component to be identified in this challenge.

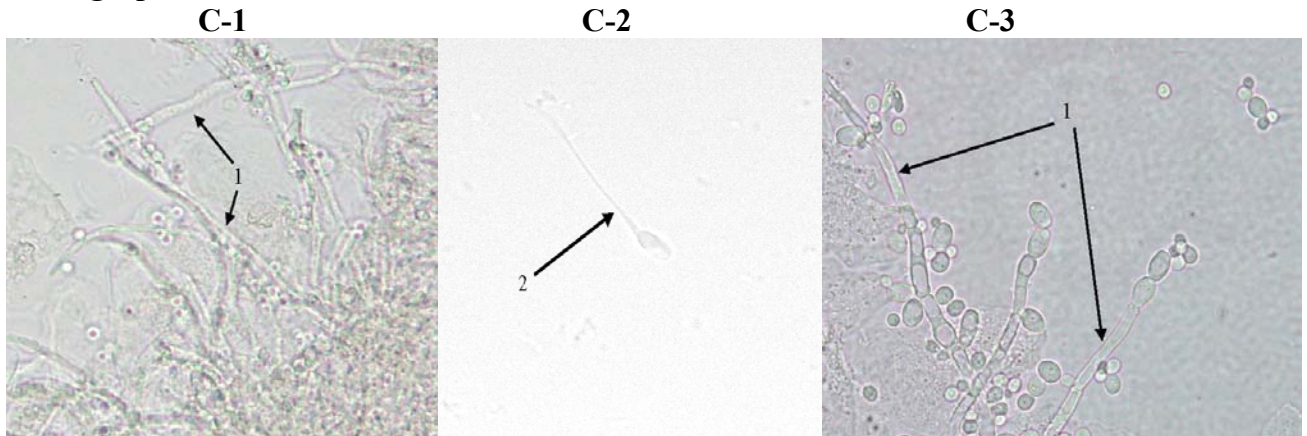
Micrograph B



Micrograph B: Intended Response

1. **Trichomonas:** This set of micrographs was taken with a phase contrast microscope, so the contrast is higher than would normally be observed in brightfield. It allows us, however, to see the typical morphology of trichomonads. The trichomonads tend to be teardrop shaped with a group of flagella at the pointed end of the cell. While flagella are seen in this set of micrographs, they are typically not observed in brightfield microscopy. In a normal wet mount preparation, the trichomonads will be viable. They can be seen moving when viewed under low power (using the 10X objective). The trichomonads are approximately the same size as white blood cells. They may be confused with WBC if the slide is evaluated after the trichomonads have died (it is important to evaluate cells immediately after addition of saline)
2. **Yeast cells:** Most of the yeast cells in this example are not budding, but should not be confused with red blood cells. Red blood cells tend to be circular with a dimple in the middle that gives them the appearance of a miniature donut. The yeast cells in this example are associated with pseudohyphae and are variable in size and shape.
3. **Pseudohyphae:** These micrographs demonstrate the characteristic morphology of pseudohyphae. Pseudohyphae are elongated yeast cells with individual cells and have the appearance of fungal filaments (hence the term pseudohyphae). Pseudohyphae are very uniform and do not taper like the tail of a sperm cell.
4. **Squamous epithelial cell nucleus.** The arrow was intended to point to the nucleus of these two squamous epithelial cells. Some individuals responded that B-4 was an “epithelial cell, not a clue cell”. This was also an acceptable response. Since the nucleus could be observed, as well as the cellular edge, this was also an example of a non-clue cell.

Micrograph C



Micrograph C: Intended Response

1. **Pseudohyphae:** This set of photomicrographs is intended to demonstrate the differences in appearance between pseudohyphae and a sperm cell. Note that the width of the pseudohyphae (item #1) does not change, while the tail of a sperm cell (item #2) shows a definite taper toward the end. While not shown here, a budding yeast cell occasionally may be present at the tip of the pseudohyphae and may mimic the head of a sperm cell. It is important to note that a budding yeast cell tends to be round, while the head of a sperm cell has a more elongated oval shape.
2. **Sperm cell:** This photomicrograph shows the characteristic shape of a sperm cell: a tapered tail and an oval head.

Attestation Statement:

We, the undersigned, have analyzed these micrographs using the same criteria used in the analysis of regular patient specimens. We recognize that the use of micrographs does not accurately reflect the manner in which wet mount analysis is routinely performed.

Testing Person: _____

Date: _____

Site Coordinator: _____

Date: _____

NOTE: Both the Testing Person and Site Coordinator MUST sign this attestation statement. This is a regulatory requirement and confirms that these photomicrographs were evaluated using the same criteria as that used for patient samples.